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Prospects for New Information Technology in Nigerian Libraries

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Introduction

It is generally accepted that information is the key to development. It is such an important facet of national development that it should be considered as a prerequisite for sound decision making in all spheres. Libraries should be storehouses of information, whose main aims are acquiring, preserving and making available for use important materials needed by their clientele. Every library aspires to perform these functions, be it a public, university, research or school library. It is unfortunate that in most developing countries research and development are often neglected by policy makers. As collections in libraries expand and grow, it becomes more difficult to maintain the manual card catalogue. Errors occur as a result of misfiling. Misfiling of cards makes it impossible to retrieve materials easily. To upgrade the quality of service to library users, therefore, automation seems to be the answer. Nigerian libraries have very little or no technology in them today and are faced with decisions about what to do and how to pay for this new technology. In Nigeria only very few libraries serving research institutions have automated their services. As should be expected, such libraries are so efficient and effective in information storage and retrieval that university libraries are now making efforts to automate their library services also.

Automation of library services, though efficient, is a very expensive venture. The greatest handicap facing libraries that wish to automate their services in Nigeria is finance. In spite of financial constraint, libraries have to adapt to modern trends in technology if they are not to lag behind as far as information is concerned. As a result of the devaluation of the Naira (N) it is now becoming more and more difficult to justify the amount of funds needed to procure information where there seem to be other more pressing matters that require immediate attention. University libraries, especially, will find it difficult to justify automation when funds are not available even to purchase the basic current books and core journals needed for a good educational programme. A look at the number of books accessioned, and number of serial titles subscribed to over the past five academic years will show a steady decrease in both. Table I shows this progressive decrease in the Kenneth Dike Library, University of Ibadan. From Table I, it can be seen that while book purchase shows a progressive decrease over the years, great effort is being made not to reduce journal subscriptions, for obvious reasons.

Academic year	Number of books accessed	Number of journal titles subscribed to
1985/1986	4,264	6,196
1986/1987	2,106	4,761
1987/1988	2,566*	4,833
1988/1989	2,580**	4,753
1989/1990	1,769***	4,729

* In the 1987/88 session, at least a quarter of the books accessed were gifts.
** In the 1988/89 session, at least half of the books accessed were gifts.
*** In the 1989/90 session, more than half of the books accessed were gifts.

Table I.
Number of Books and
Serial Titles Received
in the Kenneth Dike
Library, University of
Ibadan, 1985-1990

In a situation such as that in the University of Ibadan library where the purchase of current books and journals shows a progressive decrease over the years (Table I) advocating automation to government may have questionable economic justification.

The Need to Automate

The numbers of publications in science and technology and other disciplines have increased at such a tremendous rate that they have posed a serious problem in the handling of the amount of information contained in them. One of the contributing factors to this "information explosion" is the diversification of the various scientific fields. Without automating, it will be impossible for all these important resources to get to researchers in time before such information becomes obsolete. University and research libraries in Nigeria are finding it impossible to acquire all the serial publications needed by their clientele for research purposes due to lack of funds. In spite of this handicap, it is their duty to satisfy the needs of their readers. University libraries, especially, should be distinguished by the national and international significance of their collection for higher education and scholarly research. With limited funds, it has become impossible for these libraries to carry out their primary roles — co-ordination of universal bibliographic literature and research materials in all the subjects and formats needed by their readers.

Hoare[1] argued that with the introduction of automation into academic libraries and recent developments such as integrated systems and on-line public access catalogues, the question of converting a library's manual catalogue to a machine-readable form has become a matter of increasing concern. The University of Ibadan Library's experience of automation[2] has shown that in Nigeria no single library can go it all alone.

Advantages of Automation

In general, the benefits of automation are to improve service by making work that was being done manually, be done better, faster and more effectively.

It also provides services and products that were not feasible with the manual system.

- It eliminates considerable original cataloguing labour by locating available catalogue copy.
- The on-line cataloguing service searches for data and at the same time catalogues rapidly.
- The system eliminates skilled clerical and cataloguing labour, resulting in a significant cost-saving measure.
- Cards and labels are automatically produced ready to use without manual annotation.
- Book catalogues and accession lists can be produced automatically, thus saving considerable typing and proof-reading time.
- Shelf-list data stored by the computer can be automatically analysed to determine subject strengths and weakness in the library collection.
- Accession lists of newly acquired materials produced by the system should alert the user to new information.
- Extensive subject bibliographies can be compiled using data from the computer.

Establishing Goals for Automation

It should be borne in mind that automation is an expensive but very efficient system. It is important to find out the cost of automation and the annual maintenance cost before embarking on a project of this nature. Converting a manual catalogue to a machine-readable one is very expensive. It is important that the decision to automate be taken seriously. During the planned period, each library should work out a systems analysis in order to be able to assess properly if the result will justify the amount of money that will be put into it. This cost-benefit analysis is very important during the planning stage. Individual libraries should work out, define and identify their needs and priorities as the needs of a university library will be different from that of a research or public library. Their individual needs will depend on the objectives and functions of their various institutions. A library does not necessarily save money by switching from cards to an alternative format[3]. As a result of the economic recession in Nigeria, many libraries will not be able to automate their services because of lack of funds. It has been established that converting to a machine-readable catalogue is not necessarily cheaper than using a manual one. Co-operation among libraries will be necessary if this dream is to be realised in Nigeria. It is important that the library that intends to automate should always seek advice from others that have successfully automated their services. During the planning stage it is important to get the government involved because, if they are to provide the funds, a lot of wooing has to be done to convince the government about its economic viability. Government would want to know how much it will cost to develop, maintain and operate the system before committing itself.

One of the problems facing libraries that have tried to automate but failed is that of literacy. The computer expert should work hand in hand with the librarian for the project to be successful. The librarian should draw up a flow-chart that would indicate the function of all sections that are to be automated for the expert to draw up a suitable program. Staff should be adequately trained in the use of computers, especially the microcomputer. Only interested staff in all cadres should be trained.

An important factor to consider in the choice of hardware is that of technical support. The greatest problem faced by developing countries in this regard is that of maintenance of equipment. Lack of this knowledge has resulted in abandoned projects throughout the country. Acquire a system that has a good local technical support.

There is need for adequate infrastructures. A good telecommunication system in the country is necessary if libraries are to assess each others' databases on-line. Electricity should be stable. A back-up or UPS (Uninterrupted Power Supply) will be a necessity.

Importance of Co-operation among Libraries

With the present economic situation in the country most libraries that want to automate will not be able to do so. The easiest way to get over this hurdle will be co-operation among libraries. In order to co-operate effectively there is a need to formulate policies that will guide participating libraries on the purchase of hardware and software. Compatibility of hardware and software is very important for co-operating libraries as this will make the exchange of bibliographic data easier. For ease and effectiveness among co-operating libraries, standardisation of bibliographic description is necessary. Efficiency will be ensured if AACR 2 and ISBD (International Standard Book Description) are strictly adhered to. MARC II will be necessary for the coding of records.

An important trend in some developed countries is that of sharing the central processing unit and expenses among several libraries. In this way the cost is reduced per library while their services are maximised. In this way participating libraries will have their own databases. Microcomputers are preferred in many libraries for automation. This is because it is easier for the microcomputer to be used in two capacities: (1) as a terminal (to connect with any of the conventional database systems and (2) on its own (as a resource for its own local materials).

Co-operation allows the bibliographic records of all participating libraries in the network to be automatically available to others. This saves cataloguing time and thereby reduces cost. To be able to interlink with international networks, standard control numbers like ISBN (International Standard Book Number) and LCCN (Library of Congress Catalogue Number) are needed for information retrieval. For Nigeria, the new technology of CD-ROM will be very appropriate. CD-ROM offers whole databases on compact disks which can run on most microcomputers with a CD-ROM attachment. CD-ROM offers the possibility

of sharing resources within a geographical area and makes the resources of large databases available without the restrictions of our unreliable telecommunications system.

Conclusion

In conclusion, automation is an expensive but very efficient system. From the outset, it should be realised that automation hardly saves money. To automate, therefore, a high-powered decision-making process is required. Small libraries may have no need for automation. For those that want to automate, there should be a need and justification for it. Academic and research libraries have a need to automate their services. With dwindling financial resources in our institutions of higher learning, networking and co-operation among such libraries for shared cataloguing and resources will be the answer.

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